

International Center for Research on Women

Women and AIDS Research Program

**Training Teachers to Lead Discussion Groups on HIV/AIDS Prevention
with Adolescents in Zimbabwe**

by

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Project Summary
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Introduction

The crisis in Zimbabwe created by HIV/AIDS is unparalleled. Since the first AIDS case in Zimbabwe was reported in 1987, there has been a continual increase in the incidence of HIV infection. Between 1987-95, 41,881 AIDS cases were reported (Ministry of Health 1995). As in other developing countries, incomplete reporting is likely to yield an underestimate of the true number of cases. Data from seroprevalence studies show that more than one third of pregnant women tested in some cities are infected (U.S. Bureau of the Census 1997). In Zimbabwe females account for a higher proportion of AIDS cases in the 15-19 and the 20-29 year old age groups than males (Ministry of Health 1995). Since AIDS is the terminal stage of HIV infection, initial infection is occurring at a very young age among females in Zimbabwe.

It has become increasingly apparent that prevention efforts, particularly education, should begin with young people. As noted by UNICEF "Education, life skills training and access to reproductive health services, particularly for young people who are now most at risk of contracting AIDS, are all essential if the disease's spread and its consequences are to be curtailed" (UNICEF 1995). Zimbabwe has responded to this call for AIDS education for young people in a number of ways. For example, in June 1993 work sessions leading to the IXth International Conference on AIDS in Berlin were held in Zimbabwe. The role of schools in the prevention of HIV, sexually transmitted diseases (STDs), and other health problems was discussed. Participants agreed that if education about HIV is comprehensive and holistic and aims to promote a positive and healthy view of sexuality, then young people can acquire the knowledge, values, attitudes, skills, and support needed to avoid health problems (Hygie 1993).

In Zimbabwe, providing adolescents with comprehensive education on HIV and STDs has been the aim of the Adolescents and AIDS Prevention Project of the Department of Community Medicine, University of Zimbabwe. Since 1992 the project has undertaken two overlapping phases of research. The primary emphasis of phase one was on documenting adolescents' perceptions of their sexuality, the factors that influence adolescent sexual behavior, and the role that family members play in providing sex education to adolescents. Findings from the Phase One pilot intervention showed that classroom discussions were an effective medium for providing information about responsible sexual decision-making to adolescents and that properly trained teachers could successfully facilitate them (Bassett and Sherman 1994). This report summarizes the findings from the second phase of research which evaluated the feasibility and impact of training teachers to lead classroom discussions with adolescent students on HIV/AIDS prevention.

Findings from Phase One

In 1992-93 the Department of Community Medicine at the University of Zimbabwe investigated the sexual attitudes and experiences of Zimbabwean secondary school students. A series of focus group discussions were held with male and female adolescents attending schools in the Harare area on a number of topics, including values, beliefs and sources of information about sex; sexual decision-making; relationships between boyfriends and girlfriends; and knowledge of AIDS and STDs. The discussions revealed that the boys and girls were getting most of their information about sex from friends, romance novels, movies, and magazines. Historically, adolescents in Zimbabwe have been taught about sex by designated relatives. However, urban migration and changing family relationships have contributed to the demise of traditional instruction by older relatives and sex education in the schools has been limited to the biological facts of reproduction.

As the research progressed it became clear that the students were eager to continue talking about these topics. The research team began to think of the discussions themselves as an intervention and to believe that facilitating such discussions was an important role that adults could play.

Although the research team felt that classroom discussion sessions could help young people understand that they have the ability to make informed decisions about sex, it was not clear who should facilitate such discussions. One obvious possibility was teachers. Although the students expressed skepticism over the ability of teachers to be confidential, open, and nonjudgmental, the research team chose to develop a pilot program to test the feasibility and acceptability of training teachers to lead classroom discussions activities among students. Since teachers are clearly the adults with whom adolescents most frequently come into contact they could, if properly trained, facilitate classroom discussion as skillfully as the university research assistants who conducted the focus groups. Guidance and Counseling is a program within the schools that addresses the personal educational, and vocational needs of students.

Working closely with the Education Officer responsible for Guidance and Counseling in the province of Mashonaland, four districts —Marondera, Wedza, Murewa, and Mutoko—were identified for implementation of the pilot teacher training program. Three workshops were held in January, May, and September of 1992. A total of 25 teachers from 15 schools were trained to implement HIV/AIDS prevention training with their students using a discussion group format. The pilot teacher training intervention was well received by both teachers and students, largely because of the participatory nature of the training and the provision of materials, new activities, and support through regular follow-up visits (Bassett and Sherman 1994).

Goals and Objectives of Phase Two

The overall goal of Phase Two was to continue the effort begun in Phase One to improve young people's knowledge, attitudes, skills, and behavior associated with HIV prevention. This was to be accomplished by increasing the number of teachers trained to lead participatory classroom discussions on growing up, relationships, sex, and HIV/AIDS; developing and distributing resource materials for teachers; and monitoring and evaluating program outcomes. The project continued to be implemented in the province of Mashonaland East, in the same four districts originally selected for Phase One: Marondera, an urban area; Wedza, primarily a rural area; Murewa, a district encompassing both a "growth point"¹ and rural areas; and Mutoko, primarily a rural area along one of the major transport routes to Mozambique.

Methodology and Intervention Design

Phase Two activities aimed to reach as many secondary schools as possible through teacher training workshops. A total of 95 teachers from 43 schools (1 or 2 teachers per school) were trained. Most were responsible for teaching Guidance and Counseling and AIDS education to students in Forms 1 to 4, and were selected by headmasters in their schools. Some schools chose to train more teachers to compensate for the attrition resulting from transfers, resignations, and promotions.

The objectives of the training workshops were:

¹ A growth point is an administrative center with increased social facilities and a larger shopping complex than is usually found in rural areas.

- ! to encourage and enable teachers to talk freely with young people about human relationships;
- ! to provide teachers with correct and sufficient information to teach young people about HIV infection, AIDS, and other STDs;
- ! to acknowledge and discuss the teacher's own feelings and fears concerning HIV/AIDS, with the aim of fostering positive attitudes and values toward the teaching of sexuality, relationships and HIV/AIDS;
- ! to identify ways to strengthen ties within the community among teachers, students, and parents in the fight against AIDS.

During Phase Two, a total of seven teacher training workshops were conducted. Each workshop ran for two days and was highly participatory. The teachers were taught the necessary skills through participation in exercises they would undertake with their pupils in the classroom. The trainers included the Project Coordinator, the Regional Education Officer for Guidance and Counseling, and the Project's Technical Advisor from the University of Zimbabwe. Some teachers trained in earlier workshops helped to train teachers in subsequent workshops. The aim of the workshops was to equip the teachers to facilitate classroom discussion during the standard 40-minute class period allotted to all subjects within the secondary school curriculum, including Guidance and Counseling/AIDS education.² It is important to point out that the teachers were

²In 1994 the Ministry of Education mandated that all secondary schools implement Guidance and Counseling classes. In early 1995 AIDS education was also made a mandatory part of the curriculum. The teachers responsible for Guidance and Counseling are generally also responsible for AIDS education. However, without appropriate training, teachers have been reluctant to tackle the subject of

not trained to teach a standardized curriculum but rather to use nondidactic methodologies to stimulate discussion on sensitive topics with students.

Five information packets were sent to each school. With the first three mailings, each school was sent one package to be shared by all the teachers. It was later decided that each teacher needed to have a personal packet of information from which to teach students and train other teachers, so the last two packets were sent to every teacher.

Providing material support to teachers was crucial to the project because most schools in Zimbabwe suffer from a lack of resources such as textbooks and audiovisual equipment. Also, because teachers in Zimbabwe have limited access to the literature available on AIDS education and related topics, they were sent the following: (a) photocopies of materials developed for youth, (b) discussion guides for teachers, (c) updates on AIDS information; and (d) newsletters on AIDS prevention for use by both teachers and peer educators. These materials were acquired from a variety of sources, including publications by international AIDS organizations, "AIDS News Briefs" accessed through e-mail, conferences, and UN and other development agencies.

The objectives of the classroom discussion sessions were:

- ! to provide young people with information about HIV/AIDS and STDs;
- ! to encourage young people to explore their values and attitudes about sexuality and sexual behavior;
- ! to teach young people new skills to help them make and maintain informed decisions about their sexual behavior.

HIV/AIDS because of their own inadequate knowledge about the issue, and also their inability to teach using participatory methods.

Two teacher follow-up workshops were also conducted in June 1994 for the teachers in the Mutoko and part of the Murewa districts, and in February 1995 for the teachers in Wedza, Marondera, and the remainder of the Murewa districts. These workshops gave teachers the opportunity to report on their activities, practice their counseling skills, discuss ways to integrate AIDS prevention into activities outside the classroom, and share ideas on how to involve the community in their efforts. These workshops targeted teachers who had some experience with using participatory methods in the classroom.

Due to limited resources it was not possible to train all the secondary school teachers in the four targeted districts.³ Instead, teachers who attended a training workshop were encouraged to train other teachers at their schools to ensure that more students receive HIV/AIDS information and education and that trained replacement are available if the HIV/AIDS teacher leaves.

Monitoring

One to three visits were made periodically to each of the 43 project schools during which the project team observed ongoing class sessions, met with the students, showed a video, and introduced a person with AIDS who gave a talk to the students. There were 59 visits to schools in total, with 46 lasting for a whole school day. Often the project team was accompanied by the Education Officer for Guidance and Counseling. The visits allowed the project team to motivate

³The number of teachers per secondary school ranges from 6 to 15.

the teachers through personal contact and to assess how they used their new skills. When necessary, the project team revised the discussion tools used by the teachers and identified areas that needed special focus. These visits also served the purpose of motivating the headmasters, some of whom were not supportive of the program and were sometimes reluctant to add to the timetable a on which the students would not be tested.

Project Evaluation among Teachers

To document teachers' perceptions of the program and project outcomes, the research team collected data from teachers in a number of ways. First, teachers were asked to keep records in the form of scheme books of their classroom discussion sessions so that the project team could review and discuss the following with the teachers: classroom discussion process, content of the lessons, scheduling, and teachers' perceptions of class outcomes. Second, a questionnaire was administered in 1995 to all of the 120 teachers from 58 project schools trained in both Phases One and Two. The questionnaire was pretested at an evaluation workshop for teachers that was held in February 1995. The questionnaire was sent out twice—first at the beginning of the second term of the year (there are three terms a year) and again at the beginning of the third term. Sixty-one questionnaires were received from teachers in 40 of the project schools—a response rate of 51 percent of teachers representing 83 percent of all project schools. Finally, one teacher and the headmaster from each of ten project schools were interviewed in November 1995 on the same day that evaluation discussion groups were held with students to assess their perception of the program. There were three male and seven female teachers interviewed; their average age was 29 years. Separate discussion guides, one for teachers and one

for headmasters, were prepared. The teacher interview lasted an average of one hour while the headmaster interview was 20 to 30 minutes.

Project Evaluation among Students

The research team used evaluation discussion groups and a questionnaires administered before and after the classroom discussion sessions to determine students' opinions of the sessions and to quantitatively asses changes in their knowledge, attitudes, perceptions, and behavior. The project schools selected for data collection were rural and the teachers had been conducting classroom discussion sessions on HIV prevention for two academic years. The project team had visited the teachers, in these schools previously and had shown the students a video on AIDS. Moreover, all these schools were visited by a person with AIDS who gave a talk to the students, followed by a question-and-answer session.

The questionnaire was first administered in April 1995 to all Form 3 secondary school students in attendance on a single day from eight project and eight control schools. The project schools chosen were those whose the teachers had consistently implemented the classroom discussions, as based on observations made by the research team. Control schools were chosen if they had no special AIDS education program, including a recently launched initiative by UNICEF, and if they were similar to project schools in terms of type of school (government, boarding and others.), proximity to a town, size of the student body, and number of teachers. The questionnaire was administered seven months later, in November 1995, to the same sample.

The questionnaire, one for boys and one for girls, was based on the Narrative Research Method developed by the World Health Organization (1992) to assess how people organize and

interpret thoughts about their life experiences. The intended themes of the narrative are adolescent love, relationships, and sexual experience, but the specific story is developed for each setting. The narrative used in this study was developed in Zimbabwe prior to this study in a series of workshops in which youth play-acted based on their own experiences and those of their friends. The narrative that emerged as a composite from the play--acting was the following: Chipo, a young girl, and John, her male friend, fall in love, have sexual intercourse, and experience the problems of STDs and pregnancy. After listening to the narrative, students were asked to respond to questions about how they think Chipo and John will feel and react to certain situations, and about the respondent's own attitudes and experiences (see box).

The Narrative Research Method was originally designed as a descriptive technique to assess respondent attitudes at one point in time. In the current study, its application was extended to evaluate changes over time (pre-post) and between project and control schools. The same narrative was read and the same questionnaire was administered on two separate occasions. The questionnaire aimed to measure changes in (a) students' knowledge of HIV/AIDS and STDs, (b) students' attitudes and perceptions of normative behavior associated with sexuality and relationships, and (c) students' sexual behavior and experiences. The questionnaire was administered by the teachers in both the Shona and the English languages.⁴

Ten evaluation discussion groups were conducted in November 1995 with 100 Form 3 students from ten project schools⁵. For each school, one mixed-sex discussion group was held in

⁴In early April 1995 UNICEF held a workshop to review the questionnaire that they had used in 30 schools. An English-only questionnaire was felt to be a problem because some English words can be misunderstood by a.

⁵Seven of these schools took part in the pre- and post-questionnaire.

a quiet classroom with ten students—five boys and five girls. Two experienced Shona-speaking facilitators led the evaluation discussion groups. All the sessions were tape-recorded and took place over a 2-3 hours with a short break in the middle. Prior to the evaluation discussion groups, the facilitators visited one Form 3 class to conduct an "ice-breaker" with the students, involving a brainstorming session the word "love." From this exercise the facilitators selected ten students whom they thought would be able to share their ideas and beliefs in the discussion. The evaluation discussion groups aimed to find out about (a) students' feelings and thoughts about AIDS and persons with AIDS; (b) their perceptions about boy--girl relationships and adolescents' risk of HIV infection; (c) their opinions about the content and methodology of the classroom activities, including their usefulness to themselves and their families; (d) the acquisition of new skills as a result of participating in classroom discussion sessions; and (e) the adoption of new behaviors or behavioral intentions in order to prevent HIV infection.

Excerpts from the Zimbabwe Narrative "Chipo and John" and Sample Questions from the Questionnaire

John and Tonderayi, two Zimbabwean boys aged 16 years and in Form 4, are good friends. Chipo and Jane, two Zimbabwean girls aged 15 and in Form 3 in the same school, are also friends. John feels attracted to Chipo and Chipo likes John. John makes arrangements to see Chipo privately... John likes to see Chipo as often as possible.... One day John buys Chipo a pencil and Chipo is very happy with it and proudly tells her friend Jane. A week later John writes Chipo a letter in which he expresses his feelings for her.... John and Chipo start to meet each other more often.

Q: When Chipo and John meet each other privately, how is Chipo most likely to behave?

- a. She will be very shy and agree to everything John proposes.
- b. She will be relaxed and talk with John. When he proposes sex, she will beat him and walk away.
- c. She will be shy, but when he proposes sex she will show him quietly that she is not ready to have sex.
- d. She will be relaxed and talk with John. When he proposes sex, she will agree because they love each other.

Gradually the relationship between John and Chipo gets stronger. They take long walks, talking to each other. John flaunts the relationship by buying presents for Chipo in front of friends... Now Chipo also starts to make appointments with John. John hugs Chipo when they are not being seen by others. Chipo feels proud... but feels jealous whenever John walks or talks with another girl.... Suppose John feels like having sex with Chipo.

Q: When do you think Chipo is most likely to agree to have sex with John?

- a. In their second private meeting.
- b. After several meetings, a few months later.
- c. When John makes the promise to marry her.
- d. After John has paid *lobola*.
- e. When John feels it is time for sex.
- f. Never, not before marriage.

.....Suppose Chipo and John have sex.

Q: How is Chipo most likely to feel after her first sexual encounter with John?

- ! She feels so embarrassed that she cannot face John. She cannot look him in the eye.
- ! She becomes afraid that John will consider her loose and she is worried that he will leave her soon.
- ! She feels guilty for having had sex, but on the other hand she feels happy that she has the experience.
- ! She feels ashamed as if everybody knows what she has done.
- ! She is afraid of what others will say if they hear of what she has done.
- ! She feels happy. Now she can boast to her friends.

The story goes on to suppose that Chipso develops a vaginal discharge. She tries her own treatment but it does not work, and she decides reluctantly to go to the clinic. Her infection is cured, but then she suspects she is pregnant. Chipso eventually decides to tell John that she is pregnant. The questionnaire finishes with true false questions on information about STDs and HIV, and questions eliciting opinions about friendship, love, and sex.

Intervention Findings from Teachers

A total of 95 teachers from 43 schools were trained during Phase Two. Approximately 60 percent of the teachers trained by the project were male and 40 percent were female, ranging in age from 24 to 35 years. Class sizes ranged from 30 to over 50 students. Taking into account the 15 schools reached in Phase One, 47 percent of all schools in the targeted districts were covered. The findings from the different methodologies used with teachers have been integrated and are presented below.

Implementation of Classroom Discussion Sessions

All but one teacher who responded to the questionnaire had successfully integrated Guidance and Counseling/AIDS education into their school timetable. Teachers from 23 schools reported teaching the two subjects in the same time slot on a weekly basis, 13 had separate schedules for each, and 4 schools alternated the subjects weekly in the same time slot. These data suggest that during the seven-month period between the pre- and post-questionnaires (April - November 1995), students of the vast majority of teachers who responded to the survey were exposed to approximately 24 lessons.

Teachers reported that they covered 58 themes in their classes, which could be categorized as follows: HIV/AIDS, relationships, adolescence and growing up, consequences of early premarital sexual activity, gender roles and expectations, values clarification, and peer pressure. All these topics had been addressed in the teacher training workshops. Interestingly, teachers also cited covering a number of other topics that had not been addressed in the training: drug and substance abuse, care and support of persons with AIDS, personal hygiene, and rape.

According to data from the scheme books and the questionnaire, the methods used most frequently by teachers to stimulate discussion were picture codes, small group work followed by report back to class, role plays, class debates, and classroom discussion sessions. Several teachers also cited methods that were not covered in the training but were well received. These included a "Dear Aunt" corner in which students wrote anonymous letters about problems that they faced,

which were later discussed, and a suggestion box in which students anonymously submitted questions for discussion.

When asked to describe a successful class session, many teachers mentioned role-playing various situations with a follow-up discussion. Besides being an effective learning technique, role- playing helped the teachers to better understand how students feel in certain situations, such as when girls get raped, and the role plays provided insights about how parents and teachers should react. The themes and activities most frequently mentioned by teachers as being successful were as follows:

- ! Saying "no" to sex and peer pressure. Teachers reported asking students to do a role play of a boy trying to persuade a girl to have sex, including the use of threats. Teachers also mentioned having groups of students draw pictures with messages on how to creatively say no to sex so that students could keep their friends while disagreeing with them.
- ! Playing "Moms and Dads." Students discuss cultural beliefs by arguing for or against a variety of statements about sex and growing up.
- ! Discussing whether boys and girls should remain virgins.
- ! Seeing a video and discussing it.
- ! Listening to a presentation by a person with AIDS, followed by a discussion.

Findings from classroom observation revealed that teachers' skills with participatory techniques varied. Some teachers could facilitate a discussion on a topic with or without teaching aids, whereas others struggled and tended to be repetitive on certain topics. Overall, about three fourths of those observed were able to use the participatory methodologies that were demonstrated during the teacher training workshops. Female teachers were more likely to be successful than male teachers. However, factors thought to be more important than the sex of the teacher were the teacher's interest in the topic, openness to new ideas and methodologies, and support from the headmaster. Findings from the teacher interviews highlighted the challenging nature of their new role. For example, according to one teacher, "Sometimes I am not very sure

exactly what to do, but because of the material provided, I deliver the goods." Another noted, "Earlier I felt I didn't know much about this subject but now I'm OK."

Teachers' Comments about Student Participation

Teachers reported that using participatory teaching methods such as role plays, picture codes, drama, and responding to anonymous questions from a suggestion box successfully engaged both girls and boys in classroom discussion sessions. Other activities that ensured participation by the whole class included quizzes, debates, and poetry competitions between classes.

During classroom visits the project team noticed some gender-based differences in participation in the classroom discussion sessions, a fact also reported by teachers. The prevailing cultural expectation that girls be reserved when discussing sexual issues may explain their initial reticence. According to one teacher, "Boys talk more of experiences due to more freedom in life than girls in their cultural background."

The differences were more pronounced at the start of the sessions as indicated by the following remarks from teachers:

Initially girls were shy but now participate equally because of encouragement from male and female teachers who freely discuss AIDS in the presence of pupils and at assemblies.

When the scheme was launched only extroverted boys participated. Girls remained silent or kept thoughts to themselves mainly because of home and social background. There has been a remarkable change. Girls now participate and ask questions.

Boys used to participate more but now girls feel blame against them is unfounded and they are up in arms in their defense.

The project team and the teachers also noted differences in participation by age. For example, students in Forms 1 and 2 were eager to participate regardless of gender. Teachers were of the opinion that most children at this age were not yet sexually active and were eager to learn about the topic. However, in Forms 3 and 4, girls were quieter. The teachers believed that

this indicated that the female students had either begun sexual activity and did not want to incriminate themselves through something they would say or perhaps felt they were "being talked about" whenever the teacher brought up certain topics. As noted by one teacher, "In Forms 1 and 2 both boys and girls participate well but in Forms 3 and 4 the boys only participate while girls are shy to talk."

In the few project schools with Forms 5 and 6 teachers believed that the older girls were confident in their academic success and more willing than younger female students to discuss these issues.

The topic under discussion also influenced how actively boys and girls participated. According to one teacher, "If the topic was girl-centered (e.g., pregnancy) then boys participate more but if it is drug abuse (more common in boys) then girls participate more." Another noted, "Girls enjoy topics on manners and morals and boys enjoy topics about sex."

Despite the obstacles to female participation such as cultural norms that encourage girls to be reserved about sexual issues and girls' fear of being talked about, teachers gave enthusiastic feedback about mixed-sex classroom discussion sessions. They believed that mixed-sex sessions encourage debate and sharing of ideas, allow children to learn from and appreciate each other, and improve self-confidence. However, most teachers admitted that certain topics, particularly puberty, problems girls or boys face in relationships, looking after one's body, and sex and the reproductive system were best discussed in single-sex sessions.

Teachers' Attitudes about AIDS Education

Teachers who responded to the questionnaire felt that AIDS education is important and the vast majority were proud to teach the subject. "Gives me a form of responsibility and respect from the community as their counselor, said one teacher. Another recognized that there was" "No other place for the students to discuss this topic..." "Feel I'm doing a service to the nation was one teacher's view of the importance of AIDS education; another's pride in the task was evident when she said," "Feel like a

mother or auntie to pupils. They are close to me.” "At first it was difficult for me but now I enjoy every bit of it."

Support from School Headmaster and the Ministry of Education

Data from the teacher questionnaire revealed that the headmaster was considered supportive in all but one of the project schools, where the teacher reported not knowing if the headmaster's support was supportive or not. Twenty-two teachers reported that the headmaster was better in 1995 than in 1994. Teachers made the following comments about their headmasters:

"...put both Guidance and Counseling and AIDS education on the timetable this year."

"He asks the teachers to give the subject as much weight as an examinable subject."

"now makes sure that classes are attended."

"communicates new material to the head of department and is ready to discuss any problems."

Support was also received from the Education Officer for Guidance and Counseling in Mashonaland East who made at least 38 visits to the schools to assist the headmasters with scheduling the AIDS education and/or Guidance and Counseling sessions. The Education Officer also helped to train teachers who had not received AIDS education, thus giving them an opportunity to teach the subject.

School and Community Outreach

In response to the question on the questionnaire about in-service training, 30 teachers indicated that they had trained from 1 to 10 teachers in their schools, and four reported training all the teachers at their schools. Teacher training was conducted as workshops in staff development meetings in schools. Information and materials were shared, and demonstration lessons were conducted for the staff, who were also invited to the teacher's classroom to observe the classroom discussion sessions. Staff from one school reported that the HIV/AIDS syllabus was planned in

consultation with other teachers so that the issue could be explored at all form levels at the same time. A round table discussion was held at one school to discuss at what level these topics should be taught to the students.

During the training workshops, teachers expressed interest in involving parents and the community in AIDS-prevention efforts. In response, a session on talking with parents about AIDS was added to the training.

However, linkages between teachers and parents have been slow to develop. Several schools observed an "AIDS Day" either on International AIDS Day (December 1) or on a day of their choice. Messages about HIV/AIDS transmission and prevention were conveyed to parent through drama, poetry, a parents discussion group, and, whenever possible, a video show.

Teachers who had tried to educate their communities had done so primarily by sending booklets and posters home with the students. Some teachers made presentations in the local beer halls, and at women's and service clubs. Several teachers reported trying to work with the health clinics, village-based distributors, and church preachers to educate the community. Community education efforts were boosted by concurrent activities undertaken by the Ministry of Health and the Department of Community Medicine at the University of Zimbabwe.

Teacher-Parent Contacts

Forty-one percent of the teachers surveyed reported that they occasionally have an opportunity to talk with an individual parent about HIV/AIDS, such as during open days at school, at school development committee meetings, Parent Teacher Association meetings, at church or on visiting Sundays at the boarding schools, at political meetings, awards ceremonies, and special meetings to which parents are invited. Twelve teachers reported discussing HIV/AIDS during private meetings with their students' parents.

Teachers identified a number of obstacles to communication and interaction with parents about HIV/AIDS. These included distance as some students live very far from school or in boarding schools; the demands of farming, as parents cannot easily leave their farms to attend

meetings; and alcohol consumption by fathers, as children cannot discuss information learned in school or relay messages from the teachers.

Twenty teachers reported that parents were happy with the materials being used, particularly the material on HIV/AIDS prevention; nine said that the opinions of parents were mixed, and nine did not know how the parents felt. Older, uninformed, and religious parents were reportedly unhappy with the material whereas other parents told the teachers that, because they found it difficult to discuss HIV/AIDS with their children they were happy and grateful that someone else was doing so. In an effort to acquaint parents with the material, some teachers assigned homework for the students to discuss at home with their families. Teachers from one school reported that more comfortable mothers were with the subject matter than fathers were because the men felt that their wives should teach their daughters about sex and relationships.

About two thirds of teachers surveyed reported that parents' attitudes towards AIDS education are improving, 9 percent reported that attitudes were not changing, and 28 percent did not know if they were changing. One teacher reported that parents are confused by the different things they hear about HIV/AIDS and their sources are not always good so "we teach and they detach." Several teachers said that the parents have reported that as a result of the program they are now able to talk to their children about AIDS

Teachers' Perceptions of Program Outcomes

When asked if they have noticed a change in the way that boys and girls are forming boyfriend/girlfriend relationships, 83 percent of the teachers surveyed said they had noticed what they considered to be positive changes. These included fewer girls dropping out because of pregnancy (mentioned by five teachers, with one teacher reporting that there were no Form 4 pregnancies during the 1995-96 academic year), fewer girls dating boys who are no longer in school, some students breaking off relationships, and students forming friendship, instead of romantic relationships. Some teachers felt, however, that students who claim to be postponing sex may be lying.

The teachers also felt that the students were more eager to come to class than before. Despite the fact that students are now relaxed enough to discuss relationships in the classroom, they do not feel free to come to the teacher for counseling in pairs. The teachers said that the students are better informed about AIDS, approach the teachers for advice, interact more with persons with AIDS, and are able to discuss and debate with the opposite sex.

When asked if students have sexual relationships with older, people in their area, about a third of the teachers surveyed said yes. Fourteen of these teachers did not think it was a big problem, while seven thought it was, particularly in "growth points" and urban areas where schoolgirls were more likely to live alone and be in need of money. Adult men reportedly involved with schoolgirls included teachers, policemen, and drivers. Outside relationships occurred on sports days and a few teachers believed that the mothers of some female pupils support their daughters' relationships with older men.

Desire for More Information, Skills, and Support

Findings from the teacher survey and interviews revealed a desire for more information, additional skills, and increased support to make their classes a success. Specifically, teachers wanted more information on STDs, the symptoms of AIDS, and relationships. They also wanted to learn how to: (a) deal with and care for a person with AIDS in school and at home, (b) train other teachers on the job, (c) educate parents so that students receive advice from sources other than the school, and (d) provide effective guidance and counseling to students.

In addition, teachers wanted more resource materials such as textbooks, wall charts, and videos to assist them in teaching about HIV/AIDS. They wanted to make their teaching appropriate for each grade/age level of students. They also indicated that they need longer class sessions for participatory methods to be successful, moral support and cooperation from the other teachers in the school, and more workshops and in-service training opportunities. A few teachers suggested that the Guidance and Counseling/AIDS education class should be given more importance and that the teaching of this topic should not threaten the power structure within the administration.

Student Outcomes from Evaluation Discussion Groups

Fifty male and 50 female Form 3 students, aged 15-20 years, took part in ten evaluation discussion groups on their perception of the outcomes of the intervention. Each group consisted of five girls and five boys. The girls had a mean age of 16.5 years and the boys had a mean age of 18 years.

Content and Methodologies of Evaluation Discussion Groups

Students reported that a wide range of topics pertaining to HIV/AIDS, adolescence, and sexuality were covered in the classroom. Some schools included topics that had not been covered in the workshops and in the resource material sent out by the project, such as alcohol and drug abuse, child abuse, and caring for people with HIV/AIDS. The students indicated that they benefited from almost all the topics taught and that none were irrelevant.

According to the students, class discussion sessions, group work, and reporting back were the most popular teaching methodologies. Drama, role plays, and discussing anonymously written questions were also well accepted by the students. The students reported that learning about AIDS and relationships was important to them because "It's a matter of life and death." A few boys and girls acknowledged being sexually active and wanted to know how to protect themselves. The students were also aware of their parents' high expectations of them and therefore wanted to keep themselves "safe." One student said, "We are young and the best age to educate us so that we grow up knowing what to do and what not to do." In addition to expressing an interest in teaching their families and others about HIV/AIDS, the students wanted more information on how to care for persons with the disease.

Students reported that some of their peers are not interested in learning about HIV/AIDS, believing that because they do not have the virus learning about it is a waste of time or is a ruse to prevent them from enjoying sex. Some also believe that HIV/AIDS afflicts only adults. Some boys in the evaluation discussion groups were of the opinion that knowledge about HIV/AIDS makes girls more likely to refuse sex. A few students felt that they may be HIV+ and therefore

feared knowing more. In general, students were in favor of classroom discussion of HIV/AIDS. Some of their reasons it were as follows:

"School kids are involved in sex."

"*We no longer have aunties and sekurus* to teach and advise us."

"Our parents cannot teach us because they don't know about AIDS."

"We are vulnerable because we need money."

"More young people are dying of AIDS so it is important to know and hence prevent infection."

Views on Mixed-Sex Classroom Discussion Sessions

The students were asked to comment on their class participation and to compare it with their participation earlier in the year. Most students reported that they participate more now and that there is less shyness, particularly among the girls, and more respect for other students than in the beginning. Students from two schools reported a decline in active participation, which they attributed to students' increasing maturity and subsequent involvement in relationships and sex. These students feared expressing an opinion that could incriminate themselves. Some students reportedly withdrew from class because they felt they had enough information about HIV/AIDS.

The students had different opinions about how girls' participation compared to boys in classroom discussion sessions:

"Boys participate more because they want to know more and are naturally bold and not shy."

"Girls are more affected by these issues of AIDS than boys and therefore participate more."

"Some boys participate less because they are stubborn and are even absent from AIDS classes. They are involved in sex and do not like to discuss the issue."

Reticence on the part of girls to share their thoughts was said to result from their feeling that they would be "discussed outside" (as promiscuous or "loose" girls). Student comments did indicate that girls' participation in the discussions increased over time.

The majority of respondents believed that mixed-sex classroom discussion sessions were good for sharing ideas and for the following reasons:

"There are things that boys should know about girls and vice versa."

"AIDS is spread between both sexes and so should be discussed jointly."

"One needs to know the opposite sex and their thoughts."

Some recognized, however, that shyness prevented the discussion of certain issues in a mixed-sex classroom session. There was no clear agreement on which topics were best suited to a single-sex versus a mixed-sex classroom session. For example, some thought relationships should be addressed in single-sex session, whereas other believed that in mixed-sex sessions boys and girls need to know each other's "tricks."

Teacher-Student Relationships

The majority of the students were pleased with the way their teachers facilitated classroom discussions on relationships and HIV/AIDS. The students cited teachers' openness, confidentiality, use of easily understood language, gender sensitivity, and fairness. The students also appreciated that their opinions were heard and the use of brainstorming where there are "no wrong or right answers." A few students felt that their teachers did not teach in an interesting manner, ignored some of their concerns, or were so serious that the students did not feel free to express themselves and ask questions.

Asked whether the teacher's attitude affected their honesty during class discussions the students' responses were mixed. Some teachers were felt to be trustworthy, were good listeners, respected confidentiality on personal issues, and discouraged students from laughing at each other unnecessarily—all factors that facilitated honest disclosure by students. However, other students

felt they could not be honest in class because they were afraid that their teachers would discuss the information with other teachers or the headmaster.

"We are more honest though not totally because he is not confidential."

"Sometimes you feel that you are talked about after class by the teacher with other teachers."

Perceptions of Boy-Girl Relationships

When students were asked if they had changed any of their opinions about boy-girl relationships as a result of class discussions, their answers primarily revolved around the meaning of friendship and love and of the role of sex in a relationship. Many students said that they now know "that boys and girls can be friends without love and/or sexual involvement." Some girls reported being able to resist peer pressure and did not give in to their boyfriends' demands. One boy reported that he now "no longer assumes that if a girl smiles at you then she loves you." Some students seemed to have a new understanding of the meaning of love; as one student put it "(before) we used to think that love is sex (but now we) no longer take sex as the prime thing in a relationship." This result emerged more clearly from the evaluation discussion groups than from the Narrative Research Method questionnaire.

Some girls said they felt they could now mix freely with boys without worrying that others would assume that they were having sex with boys. There was also a perception that more than before, girls were dating boys in their schools instead of older men. Overall, relationships seem to have improved on the communication level, "We now can discuss any issues with girls, e.g., menstruation" and also on a physical level, "Boys and girls now think seriously of sex."

When asked specifically whether girls feel they can say no to sex, the female respondents believed that they could only say no to sex for "good reasons"; girls think that boys will be persistent in their demands for sex, which may include physical force. According to the girls, they can resist pressures to have sex because of AIDS, fear that the boy will tell his friends, and that being sexually active can disrupt their schooling and jeopardize their future. Sex could only be refused, however, "if you haven't spent his money." Girls said that only when their "no" is firm,

consistent, serious, and accompanied by a good reason do they believe that boys will believe them.

When the boys were asked whether they believed a girl when she denied them sex, the majority indicated that they do not believe the girl.

"They never say yes."

"If she loves you, she'll do anything you want."

"Why would she agree to go to the bush if she doesn't want sex?"

The boys went on to say that it has always been the practice for girls to refuse to have sex.

Ironically, most boys believe that a girl should refuse to give in to demands to have sex for the following reasons:

"She might fall pregnant and we are not ready for the responsibility of a child."

"We want to marry virgins."

"Once she agrees to sex you lose interest in her."

Although the preceding discussion illustrates the dilemmas young people face (gaps in communication), most students participating in the evaluation discussion groups felt better equipped to make good decisions about sex as a result of sharing opinions and problems with the opposite sex.

Another question explored in the sessions concerned students' opinions of their same sex friends. Both boys and girls reported that they now feel that they can give good advice to their peers and are taking the time to discuss sex, promiscuity, HIV, and AIDS, and that they were able to discuss other things now besides love and sex. It was felt that there is less gossip among the girls and boys and that girls no longer fight each other over boys. Both sexes said that they no longer laugh at the girls who "spoil" their dresses during menstruation; the boys now understand that menstruation is a natural process. Students from several schools believed that the drop-out rate for girls due to pregnancy was lower this year than in previous years, although this finding could not be confirmed or quantified. Some responses, however, were disturbing such as, "We

can now distinguish the infected from the non-infected," and the attitude that everyone was destined to die anyway, even without AIDS.

Student Outcomes from the Questionnaire

TO BE FINALIZED

Discussion and Conclusions

Findings from this study clearly show that both teachers and students support AIDS education in the schools. Many said that there was no other forum in which to discuss these issues openly because many parents do not know the facts, and that are not well informed or accessible enough to carry out their traditional sex education roles. Moreover, using participatory methods to address sensitive topics like HIV/AIDS, relationships, and sexuality was received enthusiastically by both teachers and students.

Highly qualified teachers are crucial to interventions such as this one (Caceres et al. 1994). Key teacher qualifications include technical skills, the ability to be empathetic and a willingness to talk about sexuality. On the other hand, the program may lose much of its impact when conservative teachers unconsciously or explicitly send negative messages about teenage sexuality. For example, the increase among both boys and girls in the project schools who think that condoms often come off and get stuck inside a woman may be a result of misleading information being given by the teachers, although this interpretation was not corroborated. Since headmasters chose the teachers who would participate in the project, the research team could not ensure that the teachers selected for training had the necessary training qualifications. Nevertheless, the teacher training workshops helped teachers to gain technical capabilities and to develop empathy and a willingness to address sexuality, even if they the teachers continued to have certain negative attitudes toward sexually active adolescents. Study findings also showed that the majority of the teachers used participatory techniques in the classroom and that both they and their students were

enthusiastic about the AIDS education classes. In addition, many of the teachers also acquired a sense of responsibility and felt obliged to inform their communities about HIV/AIDS.

Although AIDS education has become part of the Guidance and Counseling curriculum, counseling itself is still an undeveloped area in most schools in Zimbabwe and teachers often are minimally able to actually counsel students. Nevertheless, during this project some students developed a deep regard for their teachers. These teachers have been able to help students and are pleased that the students now trust them, even calling them “auntie” or “*sekuru*.” This is an important development because during the planning for the pilot intervention in Phase One there was skepticism about whether teachers could be open, nonjudgmental, and nondidactic in the classroom.

Despite the enthusiasm of students and teachers for the intervention, however, fewer differences emerged than were anticipated between the students from the project and control schools when questionnaire responses from baseline and follow-up were compared. There are several possible reasons for the lack of significant differences between baseline and postintervention responses among students from the project and control schools.

First, the intervention was assessed after only seven months. Many of the questions in the assessment did not just ask about basic facts, but asked about peer and societal norms governing adolescent sexuality, gender roles, and relationships. These norms are slower to change and are to likely require a more intensive, multichannel approach than that carried out by the teachers.

A second limitation of the study was its lack of information on the actual content of classroom discussion sessions. Classroom observation and the scheme books gave some idea about the lessons being taught but both were limited. Therefore, if the intervention was not fully implemented, then the evaluation would show fewer changes than had been anticipated.

Third, the questionnaires were administered to students by the teachers instead of by the research team. Not having had much interview training, the teachers may have the questionnaires inconsistently administered or with some bias. It is also possible that students were reluctant to be evaluated by the same people who implemented the intervention.

Finally, the Narrative Research Method may not have been sensitive enough to detect changes caused by the intervention. The method may be more useful for describing how adolescents think about sexuality and relationships (WHO 1992) than as an evaluation tool. As far as we know, this is one of the first times that the Narrative Research Method has been used for pre-post evaluation. Also, several questions, offered too many possible answers for a clear trend to emerge (see box, p.), some questions had no clear "right answer" among the multiple choices presented from which an improvement in attitudes could be detected. The method of telling a narrative and asking related questions is useful, but a clearer set of possible answers is recommended. Many questions required the students to respond to what they thought would happen and not whether they agreed with the behavior or attitude in question. Therefore, at post-test students might have become more aware of negative normative behaviors and attitudes among their peers, but may have also changed their own feelings about their appropriateness; these changed views however were not detected by the instrument.

Despite the small number of differences over time and between project and control groups, findings from the other data collection methods indicate that given some initial training, a few resources, and much encouragement, teachers can develop the skills, commitment and initiative to implement AIDS-prevention activities in a nondidactic way, and that such an approach can make an important contribution towards AIDS prevention in youth. One particularly heartening result is that both boys and girls cited a new understanding about sex and relationships. The classroom discussion sessions seemed to have fostered some degree of respect and communication between girls and boys. This is important in a culture in which girls cannot verbalize their feelings and opinions about sex for fear of being identified as sexually active. Another promising finding was that students and teachers in five of the project schools that participated in the evaluation suggested that pregnancy rates may have fallen during the school year, though this result could not be verified.

The use of mixed-sex classroom discussion sessions was advantageous in this study because a greater range of opinions was expressed than is typical of single-sex groups. Single-sex groups are usually chosen because they are easier to manage and members initially speak more

freely (Balmer 1994). Students and teachers in this study recognized the value of mixed-sex discussion sessions, although some felt that certain topics should be addressed in single-sex sessions to overcome girls' reluctance to speak in front of boys. Although the girls were shy at the beginning of the year, this was found to change over time, irrespective of whether the teacher was male or female.

Unfortunately, the findings from the questionnaire and the evaluation discussion groups indicate that a large gap remains between male and female students on a number of issues such as whether sex is necessary for the continuation of a relationship and girls' meaning of the word "no" with regard to sex. Also disturbing was the high proportion of boys who admitted to using sexual coercion. In one school that took part in the evaluation discussion groups at the end of the project it was clear that boys and girls were in a stage of anger and blaming. This suggests that mixed-sex classroom discussion sessions should be initiated at younger ages when attitudes and values about sex are beginning to form so that such confrontations can be worked through before the adolescents become sexually active. Also, to discuss the issues more willingly. Teachers believed that the younger students were not yet sexually active and so had no behaviors to hide. It is important to note that while the evaluation focused on Form 3 students, Form 1 and Form 2 students were also reached by the intervention and participated eagerly. Future research efforts should focus on documenting and analyzing project outcomes with these younger students.

Overall, the study showed that a supportive school environment, including moral support and cooperation from other teachers and the headmaster, is required for effective program implementation, and that networking and collaboration with the Ministry of Education is crucial to creating this environment. The project team was successful in assisting headmasters to learn the basic facts about HIV/AIDS and to make AIDS education activities a part of the school curriculum. The project also worked with the Education Officer, who was particularly helpful to the teachers he visited and to the headmasters; many of these headmasters had been unsure about how to implement AIDS education in their schools. Armed with official documents from the Ministry of Education, the Education Officer was able to encourage headmasters to include AIDS

education in the curriculum. Mobilizing and maintaining support of this nature must be an integral, long-term part of this and other AIDS prevention approaches in schools.

In addition to its collaborative relationship with the Mashonaland East Provincial Education Office, the project also kept in close contact with the Ministry of Education and the National AIDS Coordination Programme. In early 1993 the Ministry of Education, with the assistance of UNICEF, launched a nationwide school-based AIDS Action Programme that emphasized participatory teaching methods. UNICEF's approach had been to train the Education Officers and, then the headmasters. Headmasters were expected to train the teachers, but this has not always worked. UNICEF relied on material incentives to encourage compliance and cooperation, but this had an unintended effect: the teachers and headmasters demanded money to conduct the AIDS-education activities. This stalled the national programme. Interestingly, UNICEF has begun consultations with the project team so that UNICEF can apply the personalized, bottom-up approach of this project to their larger attempt to get AIDS education into the schools. Specifically, UNICEF wants to find out how we trained teachers, encouraged headmasters to be supportive, and supported and encouraged teachers by visiting their classrooms and providing resource materials.

The efforts of this project are continuing with funding from the Southern African AIDS Training Programme through the Canadian International Development Agency, the Canadian Public Health Association, and the German Agency for International Development. The Ford Foundation to develop a peer education component, including the formation of anti-AIDS clubs in schools.

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Student Outcomes from the Questionnaire

Form 3 students from project and control schools were asked in April 1995 and again at the end of the school year in November 1995 to complete a questionnaire that utilized the Narrative Research Method. In response to a story, the questions explored students' perceptions of peer normative behavior and their own opinions and experiences regarding relationships, premarital sex, condom use, "sugar daddies", commercial sex, STDs, and HIV/AIDS.

In April, 152 boys from the eight project schools and 173 boys from the eight control schools completed the questionnaire; in the follow-up in November, 115 boys in the project schools and 153 in the control schools participated. Among the girls, in April, 102 from project schools and 86 in control schools completed the questionnaire whereas in the November follow-up, 104 girls in project schools and 80 in control schools participated. Drop-out between April and November was higher for boys than girls, perhaps because the boys take greater advantage of teacher leniency about attendance following the final exams in November. Mean age of the students was 16 years, with a range from 14 to 20 years. Most were Catholic.

For each theme area descriptive findings from the pre-test are first presented for males and females. To test for effects of the intervention, chi square was used to compare the responses of the male and female students from the project schools with those from the control schools at pre-test and at post-test. For those questions where there were more than two possible answers, responses were aggregated into two categories based on similar words and phrases. The findings are presented below.

Gender Roles in Boy/Girl Relationships

When girls were first asked how Chipó would most likely behave when she met John privately, the most common response among the project and the control school girls was that Chipó would be shy but would show John that she was not ready for sex (39.2% project; 32.9% control). Nearly one-fourth (23.5%) of project school girls and 31.7% of control school girls believed that Chipó would be shy but would agree to everything John proposed. In response to a similar question about how John would behave when he meets Chipó, the most common response of boys at pre-test in both project and control schools was that "(John) tries to see how far he can go. He will be 'testing the waters'. As soon as he thinks that Chipó will agree, he will try and go ahead and have sex with her" (39.5% project; 47.4% control). About one-fourth of project school boys (22.4) and 22.2 percent of control school believed that John would strongly pressure Chipó to have sex.

For purposes of analysis, we compared the number of girls who reported that Chipó would not agree to sex (responses c+d) with the those who said she would agree to sex (responses a+b) for the intervention and control groups at pre-test and again at post-test (Table 1). The analysis (using chi-square) found that there was no significant differences between the project and control groups at either point in time indicating that the intervention had not had an impact on how the girls perceived Chipó would interact with John. With regard to the boys, we compared the number of boys who felt that John would try to have sex with Chipó (a+b) and those that said he would not try to have sex (c+d) for the intervention and control groups at pre-test and again at post-test (Table 2). No significant differences were found indicating the lack of an intervention effect.

Premarital Sex

Both male and female respondents were asked when they thought Chipo would have sex with John. At pre-test, 45.5% of project school girls and 58.3 percent of control schools noted that Chipo is likely to agree to have sex with John when he has either paid *lobola* (bride price) or after marriage. In contrast, only 20.4 percent of both project and control school boys believed that Chipo would have sex with John under these conditions. The most common answer among boys was that she would agree to have sex during their second private meeting (27.6% project; 26.7% control) whereas only 12.9 percent and 14.1 percent of project and control school girls, respectively, gave this response. For the analysis..... (Table 3) (Table 4)

When respondents were first asked what would John do if Chipo refuses to have sex, the most common response among males and females in both groups was that John would leave Chipo. For project school girls the figure was 38.4 percent, for control school girls 36.5 percent, for project school boys 34.7 percent and 40.9 percent for control school boys. To test whether the intervention had an impact on males (Table 5) and females (Table 6), the responses that indicated John would wait for Chipo were combined (b+c+d) and compared with response a (John will leave Chipo). No significant differences were found at pre-test and post-test between the project and control groups for either males or females.

Sexual Experience

When asked how Chipo would feel after her first sexual encounter with John, most girls from project and control schools at baseline and follow-up noted that she would either feel ashamed, afraid of what John and others might think, or embarrassed. Few reported that she would be happy. About one-

third of girls from the project and control schools believed that Chipso was forced by John to have sex. A similar proportion of boys believed that she had been coerced into having sex. There was no significant differences between project and control schools at pre-test and post-test, indicating the lack of an intervention effect (Table 7)

As shown in Table 8 no girls in the project schools reported having had sexual intercourse at pre-test compared to 4.8 percent of girls in the control schools ($X^2 p=.04$). At post-test, 2.9 percent of project girls and 10.0 percent of girls from control schools said they had experienced intercourse ($X^2 p=.061$). Because the differences were significant at pre-test and post-test, it is unlikely that the intervention had an effect.

Not surprisingly, a greater proportion of boys than girls from both the project and control schools groups reported being sexually active. At pre-test 44.6 percent of project school boys and 46.7 percent of control school boys said they had had sexual intercourse (Table 8). There was no significant difference between the project and control schools at post-test, indicating the lack of an intervention effect.

When girls were asked if they had ever been forced by a boy or man to have sex, 21.0 percent of project school girls and 15.3 percent of control school girls indicated that they had (Table 9). Although there was no significant difference between the project and control schools at post-test (nearly one-fourth of both groups of girls reported that they had been sexually coerced), the pre-test and post-test findings suggest that girls may have either under-reported sexual intercourse or that they are being forced to engage in other sexual practices, e.g., fondling, anal sex, oral sex, which can also compromise their mental and physical health.

Another disturbing finding was that one-fourth of boys from project schools and 18.5 percent of boys from control schools

reported that they had forced a girl to have sex at pre-test (Table 10). Similar proportions were reported for the project and control schools at post-test, indicating the lack of an intervention effect.

Condom Use

When asked if Chipso and John were likely to use a condom, nearly one-fourth of project school girls and 35.4 percent of control school girls said no (Table 11). The proportion of project school girls giving this answer was less than that for control school girls at post-test and the difference was significant (X^2 ; $p=.047$). At pre-test, 30.2 percent of project school boys and 28.9 percent of control school boys believed that Chipso and John would not use a condom (Table 11). The difference between the project and control school responses for boys at post-test were not significant. This suggests that the intervention likely effected project girls' perceptions that condoms would be used but not the project boys'.

Interestingly, the vast majority of both girls and boys in the project and control schools at pre-test believed that Chipso and not John is most likely to suggest the idea of using a condom (Table 12). At post-test, a greater proportion of project school girls than control school girls believed that Chipso would propose condom use and the difference was significant (X^2 $p=.006$). There was no significant difference between project and control school boys at post-test suggesting that the intervention only had an impact of girls' perceptions of who would bring up condoms.

At pre-test, fewer girls than boys from both project and control schools had seen a condom (Table 13). Although the project team did not develop any classroom discussion activities that specifically focused on condom use, by post-test, the proportion of girls who reported seeing a condom was greater among the project schools than the control schools and the

difference was significant ($X^2 p=.001$). The difference between the project and control school boys at post-test was not significant indicating that there was an intervention effect on the project school girls and not the boys.

As shown in Table 14, a greater proportion of control school girls (8.3%) than project school girls (2%) reported condom use at pre-test and the difference was significant ($p=.044$). At post-test, there was no significant difference between the two groups. Not surprisingly reported condom use was higher among the boys than the girls. At pre-test, about one-fourth of project and control school boys reported ever use of condoms (Table 14). At post-test, there was no significant difference between the two groups.

"condoms often come off inside a woman and get stuck," At pre-test, a third of project girls, 39.4 percent of control school girls, 30.4 percent of project boys, 34.6 percent of control school boys believed this to be true. At pre-test

.....

When first asked about using condoms with older married men (so-called sugar daddies), 16.2 percent of project school girls and 19.0 percent of control school girls said that such girls are not likely to use condoms because condoms are no fun. At follow-up, significantly fewer project school girls gave this answer (6.8 percent, $X^2 = 4.39$, $p=0.036$). However, this change was conditioned by the finding that a significantly greater proportion of project school girls at follow-up believed that such girls will use condoms but only when the older man proposes to do so (28.3 percent to 47.6 percent, $X^2=7.96$, $p=0.005$). There was no significant change among the control school girls. During the follow-up period, the proportion of girls in the controls schools reporting that they had experienced sex with an older man increased from 1.2 percent to 7.6 percent (Fisher's test, $p=0.050$), whereas there were no girls in project schools,

at either baseline or follow-up, who reported having sex with an older man. The most common response among female respondents as to why Chipso would have sex with an older man was that "she gets favors, presents or money in exchange for sex." The second most common response, however, was that she had been raped by the man.

When asked whether boys who have sex with prostitutes use condoms, the proportion of respondents who said that such boys will use condoms every time they have sex decreased in both groups (from 58.5 percent to 47.8 percent for project boys and from 72.9 percent to 63.5 percent for control boys, both decreases not statistically significant). There was an increase among both groups, however, in the proportion of respondents who noted that such boys will use condoms only when the prostitute proposes to do. With regard to whether they have ever had sex with a prostitute, the proportion saying "yes" fell from 12.2 percent to 8.0 percent for project school boys, and from 15.1 percent to 8.1 percent for control school boys.

Knowledge about AIDS and STDs

In a few cases the project pupils showed greater increases in knowledge about AIDS and STDs than those in the control schools. Among the project school girls, fewer respondents at follow-up thought there was no increased risk of HIV for a person having a sexually transmitted disease ($X^2=12.91$, $p<0.001$), and that a strong and healthy person can be infected by the AIDS virus ($X^2=9.04$, $p=0.002$). Among the project school boys, a greater proportion at follow-up as compared to baseline noted that all STDs cannot be cured ($X^2=7.79$, $p=0.005$).

The Meaning of Sex in Relationships

When asked whether students agreed or disagreed with the statement, "If I have sex with somebody, it means I love that person," 60.4 percent of project school girls disagreed or strongly disagreed at baseline and one fourth were unsure. At follow-up, the proportion of girls who disagreed decreased to

50.5 percent but there was a significant increase in the proportion of project school girls who were unsure about the statement (from 25.7 percent to 38.8 percent, $\chi^2 = 3.99$, $p=0.045$). At baseline, a greater proportion of control school girls (45.2 percent) were unsure about the statement compared to project school girls, but the proportion of control school girls who gave this response decreased to a third at follow-up.

Compared to the girls, a smaller proportion of boys from both groups at baseline and follow-up were unsure about the statement. For example, 14.0 percent of project school boys were unsure at baseline and a similar proportion were unsure at follow-up. While a slight majority of project school boys disagreed or strongly disagreed with the statement at baseline (45.6 percent), at follow-up a similar proportion of boys agreed or strongly agreed with the statement (47.4 percent).